THE SCIENCE OF HEALTHY BEHAVIORS

Rhode Island Grade Span Expectations: Science- Grades 6, 7, 8

Grade 6			
Lesson	Standard	GSEs	
1	LS1 (5-6) – INQ+ SAE- 1a	Students demonstrate understanding of biodiversity by recognizing that organisms have different features and behaviors for meeting their needs to survive (e.g., fish have gills for respiration, mammals have lungs, bears hibernate).	
1, 3	LS1 (5-6) SAE+FAF –2a	Students demonstrate understanding of structure and function-survival requirements by describing structures or behaviors that help organisms survive in their environment (e.g., defense, obtaining nutrients, reproduction, and eliminating waste).	
1, 3, 4, 5	LS4 (5-6) INQ- 10a	Students demonstrate an understanding of human body systems by identifying the biotic factors (e.g., microbes, parasites, food availability, aging process) that have an effect on human body systems.	
1, 3, 4, 5	LS4 (5-6) INQ- 10b	Students demonstrate an understanding of human body systems by identifying the abiotic factors (e.g., drugs, altitude, weather, pollution) that have an effect on human body systems.	
1, 3, 4, 5	LS4 (5-6) INQ- 10c	Students demonstrate an understanding patterns of human health/disease by identifying the biotic (e.g., microbes, parasites, food availability, aging process) and abiotic (e.g., radiation, toxic materials, carcinogens) factors that cause disease and affect human health.	
1, 2, 3, 4	LS4 (5-6) INQ+POC-11a	Students demonstrate an understanding of human heredity by differentiating between inherited and acquired traits.	
	Grades 7 & 8		
Lesson	Standard	GSEs	
1, 3, 4	LS1 (7-8) SAE+FAF –2c	Students demonstrate understanding of structure and function-survival requirements by observing, describing and charting the growth, motion, responses of living organisms.	
1, 2, 3, 4	LS3 (7-8) POC- 9c	Students demonstrate an understanding of Natural Selection/ evolution by differentiating between acquired and inherited characteristics and giving examples of each.	
1, 3, 4, 5	LS4 (7-8) INQ- 10a	Students demonstrate an understanding of human body systems by predicting and explaining the effects of biotic factors (e.g., microbes, parasites, food availability, aging process) on human body systems.	
1, 3, 4, 5	LS4 (7-8) INQ- 10b	Students demonstrate an understanding of human body systems by predicting and explaining the effect of abiotic factors (e.g., drugs, environmental conditions) on human body systems.	
1, 3, 4, 5	LS4 (7-8) INQ- 10c	Students demonstrate an understanding of human body systems by researching and reporting on how biotic (e.g., microbes, parasites, food availability, aging process) and abiotic (e.g., radiation, toxic materials, carcinogens) factors cause disease and affect human health.	
1, 2, 3, 4	LS4 (7-8)	Students demonstrate an understanding of human heredity by recognizing that characteristics of an organism	

	INQ+POC-11a	result from inherited traits of one or more genes from the parents and others result from interactions with the environment.	
	Rho	de Island Grade Span Expectations: Mathematics – Grades 6, 7, 8	
	Grade 6		
Lesson	Standard	GSEs	
3	M(N&O)-6-3	Demonstrates conceptual understanding of mathematical operations by adding and subtracting positive fractions and integers; and multiplying and dividing fractions and decimals.	
3	M(N&O)-6-4	Accurately solves problems involving single or multiple operations on fractions (proper, improper, and mixed), or decimals; and addition or subtraction of integers; percent of a whole; or problems involving greatest common factor or least common multiple.	
3	M(N&O)-6-6	Uses a variety of mental computation strategies to solve problems.	
3	M(F&A)–6–1	Identifies and extends to specific cases a variety of patterns (linear and nonlinear) represented in models, tables, sequences, graphs, or in problem situations; or writes a rule in words or symbols for finding specific cases of a linear relationship; or writes a rule in words or symbols for finding specific cases of a nonlinear relationship; and writes an expression or equation using words or symbols to express the generalization of a linear relationship (e.g., twice the term number plus 1 or $2n + 1$).	
2, 3, 4	M(DSP)-6-1	Interprets a given representation (circle graphs, line graphs, or stem-and-leaf plots) to answer questions related to the data, to analyze the data to formulate or justify conclusions, to make predictions, or to solve problems.	
1, 2, 3, 4	M(DSP)-6-3	Organizes and displays data using tables, line graphs, or stem-and-leaf plots to answer questions related to the data, to analyze the data to formulate or justify conclusions, to make predictions, or to solve problems.	
1, 2, 3, 4	M(DSP)-6-6	In response to a teacher or student generated question or hypothesis decides the most effective method (e.g., survey, observation, experimentation) to collect the data (numerical or categorical) necessary to answer the question; collects, organizes, and appropriately displays the data; analyzes the data to draw conclusions about the question or hypothesis being tested, and when appropriate makes predictions; and asks new questions and makes connections to real world situations.	
3	M(PRP)-8-1	Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content and be able to: use problem-solving strategies appropriately and effectively for a given situation, determine, collect and organize the relevant information needed to solve real-world problems, apply integrated problem-solving strategies to solve problems in the physical, natural and social sciences, and in pure mathematics, and use technology when appropriate to solve problems, reflect on solutions and the problem-solving process for a given situation and refine strategies as needed.	
3	M(PRP)-8-2	Students will use mathematical reasoning and proof and be able to: draw logical conclusions and make generalizations using deductive and inductive reasoning, formulate, test, and justify mathematical conjectures and arguments, construct and determine the validity of a mathematical argument or a solution, and apply mathematical reasoning skills in other disciplines.	

3	M(CCR)-8-1	Students will communicate their understanding of mathematics and be able to: articulate ideas clearly and logically in both written and oral form, present, share, explain, and justify thinking with others and build upon the ideas of others to solve problems, use mathematical symbols and notation, and formulate questions, conjectures, definitions, and generalizations about data, information, and problem situations.
		Grade 7
Lesson	Standard	GSEs
3	M(N&O)-7-1	Demonstrates conceptual understanding of rational numbers with respect to percents as a means of comparing the same or different parts of the whole when the wholes vary in magnitude (e.g., 8 girls in a classroom of 16 students compared to 8 girls in a classroom of 20 students, or 20% of 400 compared to 50% of 100); and percents as a way of expressing multiples of a number (e.g., 200% of 50) using models, explanations, or other representations.
3	M(N&O)-7-3	Demonstrates conceptual understanding of operations with integers and whole number exponents (where the base is a whole number) using models, diagrams, or explanations.
3	M(N&O)-7-4	Accurately solves problems involving the addition or subtraction of integers.
3	M(N&O)-7-4	Accurately solves problems involving proportional reasoning; percents involving discounts, tax, or tips; and rates.
3	M(N&O)-7-6	Uses a variety of mental computation strategies to solve problems.
3	M(F&A)-7-1	Identifies and extends to specific cases a variety of patterns (linear and nonlinear) represented in models, tables, sequences, graphs, or in problem situations; and generalizes a linear relationship using words and symbols; generalizes a linear relationship to find a specific case; or writes an expression or equation using words or symbols to express the generalization of a nonlinear relationship.
2, 3, 4	M(DSP)-7-1	Interprets a given representation (circle graphs, scatter plots that represent discrete linear relationships, or histograms) to analyze the data to formulate or justify conclusions, to make predictions, or to solve problems.
1, 2, 3, 4	M(DSP)-7-3	Organizes and displays data using tables, line graphs, scatter plots, and circle graphs to answer questions related to the data, to analyze the data to formulate or justify conclusions, to make predictions, or to solve problems.
2, 3, 4	M(DSP)-7-3	Identifies or describes representations or elements of representations that best display a given set of data or situation, consistent with the representations required in M(DSP)–7–1.
1, 2, 3, 4	M(DSP)-7-6	In response to a teacher or student generated question or hypothesis decides the most effective method (e.g., survey, observation, experimentation) to collect the data (numerical or categorical) necessary to answer the question; collects, organizes, and appropriately displays the data; analyzes the data to draw conclusions about the question or hypothesis being tested while considering the limitations that could affect interpretations; and when appropriate makes predictions; and asks new questions and makes connections to real world situations.
3	M(PRP)-8-1	Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content and be able to: use problem-solving strategies appropriately and effectively for a given situation, determine, collect and organize the relevant information needed to solve real-world problems, apply integrated problem-solving strategies to solve problems in the physical, natural and social sciences, and in pure mathematics, and use technology when appropriate to solve problems, reflect on solutions and the problem-

		solving process for a given situation and refine strategies as needed.
3	M(PRP)-8-2	Students will use mathematical reasoning and proof and be able to: draw logical conclusions and make generalizations using deductive and inductive reasoning, formulate, test, and justify mathematical conjectures and arguments, construct and determine the validity of a mathematical argument or a solution, and apply mathematical reasoning skills in other disciplines.
3	M(CCR)-8-1	Students will communicate their understanding of mathematics and be able to: articulate ideas clearly and logically in both written and oral form, present, share, explain, and justify thinking with others and build upon the ideas of others to solve problems, use mathematical symbols and notation, and formulate questions, conjectures, definitions, and generalizations about data, information, and problem situations.
		Grade 8
Lesson	Standard	GSEs
3	M(N&O)-8-6	Uses a variety of mental computation strategies to solve problems.
3	M(F&A)-8-1	Identifies and extends to specific cases a variety of patterns (linear and nonlinear) represented in models, tables, sequences, graphs, or in problem situations; and generalizes a linear relationship (non-recursive explicit equation); generalizes a linear relationship to find a specific case; generalizes a nonlinear relationship using words or symbols; or generalizes a common nonlinear relationship to find a specific case.
2, 3	M(DSP)-8-1	Interprets a given representation (line graphs, scatter plots, histograms, or box-and-whisker plots) to analyze the data to formulate or justify conclusions, to make predictions, or to solve problems.
1, 2, 3, 4	M(DSP)-8-3	Organizes and displays data using scatter plots to answer questions related to the data, to analyze the data to formulate or justify conclusions, to make predictions, or to solve problems; or identifies representations or elements of representations that best display a given set of data or situation, consistent with the representations required in M(DSP)–8–1.
1, 2, 3, 4	M(DSP)-8-6	In response to a teacher or student generated question or hypothesis decides the most effective method (e.g., survey, observation, experimentation) to collect the data (numerical or categorical) necessary to answer the question; collects, organizes, and appropriately displays the data; analyzes the data to draw conclusions about the question or hypothesis being tested while considering the limitations that could affect interpretations; and when appropriate makes predictions; and asks new questions and makes connections to real world situations.
3	M(PRP)-8-1	Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content and be able to: use problem-solving strategies appropriately and effectively for a given situation, determine, collect and organize the relevant information needed to solve real-world problems, apply integrated problem-solving strategies to solve problems in the physical, natural and social sciences, and in pure mathematics, and use technology when appropriate to solve problems, reflect on solutions and the problem-solving process for a given situation and refine strategies as needed.
3	M(PRP)-8-2	Students will use mathematical reasoning and proof and be able to: draw logical conclusions and make generalizations using deductive and inductive reasoning, formulate, test, and justify mathematical conjectures and arguments, construct and determine the validity of a mathematical argument or a solution, and apply mathematical reasoning skills in other disciplines.

3	M(CCR)-8-1	Students will communicate their understanding of mathematics and be able to: articulate ideas clearly and logically in both written and oral form, present, share, explain, and justify thinking with others and build upon the ideas of others to solve problems, use mathematical symbols and notation, and formulate questions, conjectures, definitions, and generalizations about data, information, and problem situations.
	Rh	ode Island Grade Level Expectations: Reading – Grades 6, 7, 8
Lesson	Standard	GLEs
All lessons	R—6—2.1 R—7—2.1 R—8—2.1	Use strategies to unlock meaning (e.g., knowledge of word structure, including prefixes/suffixes and base words, common roots, or word origins (7 & 8 only); or context clues; or other resources, such as dictionaries, glossaries, thesauruses; or prior knowledge).
All lessons	R—6—3.2 R—7—3.2 R—8—3.2	Select appropriate words or explaining the use of words in context, including content specific vocabulary, words with multiple meanings, or precise vocabulary.
All lessons	R—6—7.1 R—7—7.1 R—8—7.1	Obtain information from text features (e.g., table of contents, glossary, index, transition words /phrases, bold or italicized text, headings, subheadings, graphic organizers, charts, graphs, or illustrations [6], transitional devices [7 & 8]).
All lessons	R—6—7.2 R—7—7.2 R—8—7.2	Use information from the text to: answer questions related to main/central ideas or key details (6); answer questions, to state the main/central ideas, or to provide supporting details (7 & 8).
All lessons	R—6—7.3 R—7—7.3 R—8—7.3	Organize information to show understanding (e.g., representing main/central ideas or details within text through charting, mapping, paraphrasing, summarizing, comparing/contrasting [6 & 7], or outlining [8]).
All lessons	R—6—7.4 R—7—7.4 R—8—7.4	Generate questions before, during, and after reading to enhance understanding and recall; expand understanding and/or gain new information.
All lessons	R—6—8.1 R—7—8.1 R—8—8.1	Connect information within a text or across texts (6). Explain connections about information within a text, across texts, or to related ideas (7 & 8).
All lessons	R—6—8.2 R—7—8.2 R—8—8.2	Synthesize (6) and evaluate (7 & 8) information within or across text(s) (e.g., constructing appropriate titles; or formulating assertions or controlling ideas).
All lessons	R—6—8.5 R—7—8.5 R—8—8.5	Make inferences about causes or effects.
All lessons	R—6—13 R—7—13 R—8—13	Uses comprehension strategies (flexibly and as needed) before, during, and after reading literary and informational text.

3, 4, 5	R—6—15.2 R—7—15.2 R—8—15.2	Research by reading multiple sources (including print and non-print texts) to report information, to solve a problem, or to make a decision, or to formulate a judgment (6), or to support a thesis (7 & 8) by evaluating information presented, in terms of relevance.	
3, 4, 5	R—6—15.3 R—7—15.3 R—8—15.3	Research by reading multiple sources (including print and non-print texts) to report information, to solve a problem, or to make a decision, or to formulate a judgment (6), or to support a thesis (7 &8) by gathering, organizing, and interpreting the information.	
3, 4, 5	R—6—15.4 R—7—15.4 R—8—15.4	Research by reading multiple sources (including print and non-print texts) to report information, to solve a problem, or to make a decision, or to formulate a judgment (6), or to support a thesis (7 & 8) by using evidence to support conclusions.	
All lessons	R—6—17.2 R—7—17.2 R—8—17.2	Participate in in-depth discussions about text, ideas, and student writing by offering comments and supporting evidence, recommending books and other materials, and responding to the comments and recommendations of peers, librarians, teachers, and others.	
	Rhode Island Grade Level Expectations: Writing – Grades 6, 7, 8		
Lesson	Standard	GLEs	
All lessons	W—6—1.1 W—7—1.1 W—8—1.1	Students demonstrate command of the structures of sentences, paragraphs, and text by using varied sentence length and structure to enhance meaning (e.g., including phrases and clauses).	
3, 4, 5	W—6—1.2 W—7—1.2 W—8—1.2	Students demonstrate command of the structures of sentences, paragraphs, and text by using the paragraph form: indenting, main idea, supporting details.	
All lessons	W—6—1.4 W—7—1.4 W—8—1.4	Students demonstrate command of the structures of sentences, paragraphs, and text by applying a format and text structure appropriate to the purpose of the writing.	
All lessons	W—6—2.1 W—7—2.1 W—8—2.1	In response to literary or informational text, students show understanding of plot /ideas/concepts by selecting appropriate information to set context/background (6) and summarizing key ideas to set context. (7 & 8).	
All lessons	W—6—2.3 W—7—2.3 W—8—2.3	In response to literary or informational text, students show understanding of plot /ideas/concepts by connecting what has been read (plot/ideas/concepts) to prior knowledge or other texts, by referring to relevant ideas (6); connecting what has been read (plot/ideas/concepts) to prior knowledge, other texts, or the broader world of ideas, by referring to and explaining relevant ideas (7 & 8).	
All lessons	W—6—3.1 W—7—3.1 W—8—3.1	In response to literary or informational text, students make and support analytical judgments about text by stating and maintaining a focus (purpose), a firm judgment, or point of view when responding to a given question.	
All lessons	W—6—3.3 W—7—3.3 W—8—3.3	In response to literary or informational text, students make and support analytical judgments about text by using specific details and references to text or relevant citations to support focus or judgment.	

All lessons	W—6—3.4 W—7—3.4 W—8—3.4	In response to literary or informational text, students make and support analytical judgments about text by organizing ideas, using transition words/phrases and writing a conclusion that provides closure (6 & 7); organizing ideas, using transitional words/phrases and drawing a conclusion by synthesizing information (e.g., demonstrate a connection to the broader world of ideas), (8)
All lessons	W—6—6.1 W—7—6.1 W—8—6.1	In informational writing, students organize ideas/concepts by using an organizational text structure appropriate to focus/controlling idea.
All lessons	W—6—7.2 W—7—7.2 W—8—7.2	In informational writing, students organize ideas/concepts by stating and maintaining a focus/controlling idea.
All lessons	W—7—7.3 W—8—7.3	In informational writing, students organize ideas/concepts by writing with a sense of audience, when appropriate.
All lessons	W—6—8.1 W—7—8.1 W—8—8.1	In informational writing, students demonstrate use of a range of elaboration strategies by including facts and details relevant to focus/controlling idea, and excluding extraneous information.
All lessons	W—6—8.2 W—7—8.2 W—8—8.2	In informational writing, students demonstrate use of a range of elaboration strategies by including sufficient details or facts for appropriate depth of information: naming, describing, explaining, comparing, use of visual images.
All lessons	W—6—8.3 W—7—8.3 W—8—8.3	In informational writing, students demonstrate use of a range of elaboration strategies by addressing readers' concerns (including counterarguments – in persuasive writing; addressing potential problems –in procedures; providing context –in reports).
All lessons	W—6—9.1 W—7—9.1 W—8—9.1	In independent writing, students demonstrate command of appropriate English conventions by applying rules of standard English usage to correct grammatical errors.
All lessons	W—6—9.5 W—7—9.5 W—8—9.5	In independent writing, students demonstrate command of appropriate English conventions by correctly spelling grade-appropriate, high frequency words, including homonyms and homophones and applying syllables and affix spelling patterns/rules (6); correctly spelling grade-appropriate, high frequency words and applying conventional spelling patterns/rules (7); applying conventional and word derivative spelling patterns/rules.
All lessons	W—6—11.2 W—7—11.2 W—8—11.2	Demonstrates the habit of writing extensively by sharing thoughts, observations, or impressions.
All lessons	W—6—11.4 W—7—11.4 W—8—11.4	Demonstrates the habit of writing extensively by writing in a variety of genres.
All lessons	OC—6—1.1 OC—7—1.1 OC—8—1.1	In oral communication, students demonstrate interactive listening by following verbal instructions to perform specific tasks, to answer questions, or to solve problems.
All lessons	OC—6—1.2	In oral communication, students demonstrate interactive listening by summarizing, paraphrasing, questioning, or

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	OC—7—1.2 OC—8—1.2	contributing to information presented.
All lessons	OC—6—1.4 OC—7—1.4 OC—8—1.4	In oral communication, students demonstrate interactive listening by participating in large and small group discussions showing respect for a range of individual ideas.
2, 3, 4, 5	OC—6—1.5 OC—7—1.5 OC—8—1.5	In oral communication, students demonstrate interactive listening by reaching consensus to solve a problem, make a decision, or achieve a goal.
All lessons	OC—6—2.1 OC—7—2.1 OC—8—2.1	In oral communication, students make oral presentations by demonstrating skills and logical organization and language use in interpersonal, small group and public exchanges (e.g., discussions, interviews) (6); exhibiting logical organization and language use, appropriate to audience, context, and purpose (7&8).
	Rhode	e Island Instructional Outcomes: Health Education – Grades 5 — 8
Lesson	Standard	Instructional Goal
1, 3, 4, 5	PSL—1.1 MH—1.1 INJ—1.1	Explain the relationship between positive health behaviors and the prevention of injury and premature death.
1, 4, 5	NUT—1.1	Explain the relationship between good nutrition, prevention of disease and personal wellness.
4, 5	PSL—1.2 NUT—1.2 DCP—1.2 SAP—1.2	Describe the interrelationship of: mental, emotional, social and physical health during adolescence (PSL, DCP); good nutrition and mental, emotional and physical health in adolescence (NUT); family, peers, the environment and substance abuse behaviors (SAP).
1, 4, 5	MH—1.2 SAP—1.1	Explain how the interaction of body systems is affected by: mental and emotional health (MH); substance abuse (SAP).
1, 4, 5	PSL—1.3 NUT—1.3	Explain how health is influenced by the interaction of body systems (PSL). Explain how proper nutrition affects the interaction of body systems (NUT).
4	DCP—1.3	Describe the basic structure and functions of the body systems responsible for fighting illness (Non-communicable disease: effect of lifestyle on the development of chronic disease, e.g., heart disease, cancer; effect of lifestyle on health.)
3	PSL—1.4 MH—1.4 DCP—1.4	Describe how family, peers and environment: are interrelated with the health of adolescents, including physical activity, nutrition and hygiene practices (PSL); influence mental and emotional health (MH); are interrelated (DCP).
4, 5	SAP-1.4	Describe ways to reduce risks of substance use.
3	PSL—1.5	Describe how physical activity reduces risks related to adolescent health problems.
3	DCP—1.5	Describe ways to reduce risks related to disease control and prevention during early adolescence.

1, 3, 4, 5	NUT—1.6	Describe how lifestyle, family history, and pathogens are related to the cause or prevention of disease and other health problems.
3, 4	PSL—2.2 NUT—2.2 SAP—2.3	Utilize/Access resources from home, school, and community that provide valid personal health information (PSL); nutrition information (NUT); substance abuse prevention information (SAP).
4, 5	MH—2.5 DCP—2.3 SAP—2.5	Describe mental and emotional health situations (MH); situations (DCP, SAP) requiring professional health services.
1, 3, 4, 5	PSL—3.1 MH—3.1 INJ—3.1 SAP—3.1 NUT—3.1	Explain the importance of assuming responsibility: for physical activity, hygiene, and care of the body (PSL); behaviors (MH, INJ, SAP); eating behaviors (NUT);
3	PSL—3.2 NUT—3.2	Analyze personal health habits (PSL) / eating habits (NUT) to determine health strengths and risks.
1, 3, 4, 5	PSL—3.3 MH—3.3 INJ—3.1 DCP—3.1 SAP—3.2	Distinguish between safe and risky or harmful behaviors.
3	PSL—4.3 INJ—4.3 NUT—4.3 SAP—4.3	Analyze the influence of technology on: personal health (PSL); personal and family injury prevention behaviors (INJ); nutrition (NUT); substance abuse (SAP).
4, 5	SAP—5.2	Describe how the substance use/abuse behaviors of family and peers affect others, including interpersonal relationships.
All lessons	MH—5.4 INJ—5.4 DCP—5.2 SAP—5.4	Communicate care, consideration and respect of self and others.
1, 3, 4, 5	PSL—6.1 INJ—6.1 NUT—6.3 DCP—6.2	Predict how decisions regarding risk-taking behaviors (PSL, INJ) / nutrition behaviors (NUT) / exposure to disease agents and lifestyle (DCP) have consequences for self and others.
4, 5	MH—6.1 NUT—6.1 DCP—6.1 SAP—6.1	Apply a decision-making process to emotional health issues and problems (MH) / nutrition issues and problems (NUT) / disease prevention and control (DCP) / substance abuse prevention and problems (SAP) individually and collaboratively.

4, 5	PSL—7.1 MH—7.4 NUT—7.4	Influence and support others in making positive choices: affecting environmental and personal health (PSL); about their emotional and mental health (MH); about nutrition (NUT);
1, 3, 4, 5	MH—7.1 NUT—7.1 SAP—7.1	Discuss accurate information and express opinions about: mental and emotional health issues (MH); nutrition issues (NUT); substance abuse issues (SAP).
4, 5	PSL—7.2 MH—7.5 NUT—7.5	Work cooperatively when advocating for: individual, family and school and environmental safety (PSL); healthy individuals, family, and schools (MN); nutrition-related health issues concerning individuals, family and schools (NUT).